

We Claim:

1. An integrated multimedia system having a multimedia processor disposed in an integrated circuit, said system comprising:

a first host processor system coupled to said multimedia processor;

a second local processor disposed within said multimedia processor for controlling the operation of said multimedia processor;

a data transfer switch disposed within said multimedia processor and coupled to said second processor for transferring data to various modules of said multimedia processor;

a fixed function unit disposed within said multimedia processor, said fixed function unit coupled to said second processor and said data transfer switch and configured to perform three dimensional graphic operations;

a data streamer coupled to said data transfer switch, and configured to schedule simultaneous data transfers among a plurality of modules disposed within said multimedia processor in accordance with corresponding channel allocations;

an interface unit coupled to said data streamer having a plurality of input/output (I/O) device driver units;

a multiplexer coupled to said interface unit for providing access between a selected number of said I/O device driver units to external I/O devices via output pins; and

a plurality of external I/O devices coupled to said multimedia processor.

2. The system in accordance with claim 1, wherein said external I/O devices are controlled by a corresponding one of said I/O device driver units.

3. The system in accordance with claim 2, wherein one of said external I/O device is an NTSC decoder.

4. The system in accordance with claim 2, wherein one of said external I/O device is an NTSC encoder.

5. The system in accordance with claim 2, wherein one of said external I/O device is a demodulator unit configured to demodulate wireless communications signals.

6. The system in accordance with claim 5, wherein said demodulator unit communicates with said multimedia processor in accordance with a transport channel interface arrangement.

7. The system in accordance with claim 2, wherein said multimedia processor provides video signals and three dimensional graphic signals to an external video display device.

8. The system in accordance with claim 2, wherein one of said external I/O device is an ISDN interface.

9. The system in accordance with claim 2, wherein one of said external I/O device is an audio coder and decoder (CODEC) unit.

10. An integrated multimedia system having a multimedia processor disposed in an integrated circuit, said system comprising:

a processor disposed within said multimedia processor for controlling the operation of said multimedia processor;

a data transfer switch disposed within said multimedia processor and coupled to said processor for transferring data to various modules of said multimedia processor;

a fixed function unit disposed within said multimedia processor, said fixed function unit coupled to said processor and said data transfer switch and configured to perform three dimensional graphic operations;

a data streamer coupled to said data transfer switch, and configured to schedule simultaneous data transfers among a plurality of modules disposed within said multimedia processor in accordance with corresponding channel allocations;

an interface unit coupled to said data streamer having a plurality of input/output (I/O) device driver units;

a multiplexer coupled to said interface unit for providing access between a selected number of said I/O device driver units to external I/O devices via output pins; and

a plurality of external I/O devices coupled to said multimedia processor.

11. The system in accordance with claim 10, wherein said external I/O devices

are controlled by a corresponding one of said I/O device driver units.

12. The system in accordance with claim 11, wherein one of said external I/O device is an NTSC decoder.

13. The system in accordance with claim 11, wherein one of said external I/O device is an NTSC encoder.

14. The system in accordance with claim 11, wherein one of said external I/O device is a demodulator unit configured to demodulate wireless communications signals.

15. The system in accordance with claim 14, wherein said demodulator unit communicates with said multimedia processor in accordance with a transport channel interface arrangement.

16. The system in accordance with claim 11, wherein said multimedia processor provides video signals and three dimensional graphic signals to an external video display device.

17. The system in accordance with claim 11, wherein one of said external I/O device is an ISDN interface.

18. The system in accordance with claim 11, wherein one of said external I/O device is an audio coder and decoder (CODEC) unit.